

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 00-092

WASTE DISCHARGE REQUIREMENTS
For
WASTE MANAGEMENT OF CALIFORNIA, INC.
(SIMI VALLEY LANDFILL)
(File No. 69-090)

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

1. The Simi Valley Landfill is a 274-acre waste management facility located at 2801 Madera Road, Simi Valley, California (Figure 1). The landfill is operated by Waste Management of California, Inc. (hereinafter "discharger").
2. Current permitted landfill operations at the waste management facility encompass approximately 135 acres of the 274-acre site.
3. The California Water Code Section 13263 provides that all requirements shall be reviewed periodically and, upon such review, may be revised by the Regional Board. These requirements are being revised to incorporate ground and surface water monitoring and a waste load checking program.
4. From 1971 until 1982, the Ventura County Regional Sanitation District (VCRSD), the prior operator of the disposal site, operating in conformance with Waste Discharge Requirements issued by this Regional Board, discharged Group I solid waste and liquid wastes on approximately 30 acres of a designated 75-acre portion of the property in the northerly part of the site. Approximately 29,000 tons of solid, liquid and containerized hazardous wastes were discharged during this period.
5. On May 23, 1983, this Board adopted Order 83-026 prescribing revised waste discharge requirements for the Simi Valley Landfill prohibiting disposal of liquids and Group 1/hazardous wastes.
6. In 1986 a leachate barrier and collection system was installed at the southern toe of the landfill. The purpose of the toe barrier system was to entrap leachate and prevent its seepage along the canyon alluvium underlying the fill. The main elements of this system are: a 12-foot wide subsurface compacted clay barrier keyed at least five feet into competent bedrock and extending across the canyon mouth; a leachate collection drainage layer, subdrain and sump installed on the landfill side of the barrier; a pump, discharge piping and storage tank to remove and store leachate for disposal or treatment; and an activated carbon treatment facility.
7. A final Environmental Impact Report (EIR) was prepared by the Ventura County Planning Division dated July 1988, with an addendum dated May 1989, and

certified on June 15, 1989, in accordance with the California Environmental Quality Act.

8. On November 30, 1988 the California Department of Health Services indicated in writing to the California Integrated Waste Management Board that the prior Class I disposal area was safe for additional overfilling of solid waste over the Class I waste. Pursuant to this finding, additional solid waste has been discharged above the Class I waste.
9. On February 26, 1990, this Regional Board adopted Order No. 90-034, prescribing Waste Discharge Requirements for disposal of inert and non-hazardous solid wastes, including dewatered sewage or water treatment sludge. This order was amended by Order No. 93-062 on September 27, 1993.
10. Pursuant to Order 90-034, a clay cap was constructed during 1990-91 over all parts of the former Class I area that had received waste. A one-foot thick clay cap with a hydraulic conductivity of 1×10^{-6} cm/sec was placed over previously placed cover material throughout the area. A thicker cap was placed in the northern-most part of the former Class I area, consisting of 4 to 5 feet of material with a permeability of 1×10^{-6} cm/sec or less. An area of approximately 1.5 acres within the designated Class I disposal area that had not received any waste was lined with a two-foot thick clay liner with a hydraulic conductivity of 1×10^{-6} cm/sec prior to the discharge of Class III waste.
11. Pursuant to Order No. 90-034, all areas of the site where no waste was in place prior to February 26, 1990 have been lined with impermeable liners prior to discharge of any waste. Cell A, an area of approximately 4.3 acres, was lined in January, 1990 with a 60 mil high density polyethylene (HDPE) geomembrane placed in direct and uniform contact over a one-foot-thick clay base liner with a permeability of 1×10^{-6} cm/sec. Pursuant to Order 93-062, Cell B1 (7 acres) and Cell B2 (13 acres) were lined with composite liners complying with Title 27, California Code of Regulations.
12. Prior to placement of Class III waste over the former Class I area, the clay cap over the former Class I area was filled with additional clay liner material to collect and drain leachate to a perforated pipe draining into Cell A, which is equipped with a composite (clay and geosynthetic) liner and leachate collection and removal system. The additional clay liner material and drainage system provides for leachate collection from Class III waste placed above the former Class I disposal area.
13. Two remaining areas within the approved disposal area, designated Cell B3 (approximately 10 acres) and Cell C (approximately 14 acres), will be lined before waste is discharged to them. Liners will include a composite geomembrane liner, leachate collection and removal system (LCRS) and unsaturated zone monitoring system. These systems will be constructed to the prescriptive standards of Title 27 or equivalent performance standards. This Order specifies that final design and construction methods for proposed

engineered systems be reviewed and approved by this Regional Board's Executive Officer prior to installation and that no disposal occur in a new area until the corresponding construction is completed and certified.

14. The Ventura County Planning Commission issued Conditional Use Permit (CUP) No. 3142 authorizing establishment and operation of the landfill in 1970. The CUP has been amended from time to time by Minor Modification No. 1, Major Modification No. 2, Minor Modification No. 3 and Minor Modification No. 4. Current permitted life of the landfill is based on Major Modification No. 2 issued in 1989, which authorizes operation of the site until the earlier of the following: (1) the time when approved final elevations have been reached; or (2) fifteen (15) years from the date of approval (1989). Based on the latter condition the site must close after 2004 unless the CUP is modified to extend the time.
15. Maximum elevation of the landfill will be approximately 1,110 feet above mean sea level.
16. The California Integrated Waste Management Board issued Solid Waste Facility Permit (SWFP) No. 56-AA-0007 for operation of the Simi Valley Landfill in December, 1995. The SWFP limits daily disposal quantity to 3,000 tons per day of general non-hazardous waste and 3,600 tons per month of acceptable wastewater and water treatment sludge. Current average total waste disposal quantities are approximately 1,900 tons per day.
17. The discharger filed a complete Report of Waste Discharge on February 10, 2000, at the request of this Regional Board.
18. The Simi Valley Landfill is located outside of the 100-year flood plain according to the Federal Emergency Management Agency Flood Insurance Map for Ventura County, California.
19. Land uses surrounding the waste management facility include agricultural, commercial, industrial and open space. The Ventura County Planning Department has zoned the lands adjacent to the landfill as open space and commercial planned development.
20. Surface water runoff from the landfill site drains primarily in a southerly direction toward the Arroyo Simi, located about 0.75 mile south from the toe of the landfill. Temporary and permanent storm water control facilities are designed and maintained to accommodate flows from the 100-year frequency, 24-hour duration storm.
21. Approximately 70,000 gallons per month of liquid is processed in the activated carbon treatment facility located at the toe barrier cutoff trench and sump. Of this amount, approximately 4,000 gallons per month is collected from the LCRS sump serving Cell B1 and Cell B2, and the balance is pumped from the toe barrier collection sump. No leachate is currently detected in Sump 1 or Cell A. The liquid collected from the toe barrier sump is believed to be alluvial groundwater

that has contacted waste at the base of the landfill placed prior to the requirement and implementation of liners and LCRS systems.

22. A random waste load checking program is implemented as part of the current landfill operation. The load checking program is designed to detect and prevent the disposal of unauthorized and hazardous materials, under a Hazardous Waste Exclusion Program prepared and implemented by the discharger.
23. The facility operates a gas collection system to prevent the migration of landfill gas. The collection system consists of vertical and horizontal gas collection wells, associated piping, blower, flare, and landfill gas condensate treatment system.
24. Groundwater beneath the waste disposal unit is found in two distinct zones. A shallow aquifer in alluvial materials directly underlying the landfill carries groundwater southerly toward the clay toe barrier constructed to cut off its flow and collect leachate on the up-gradient side. A second water bearing structure in the sandstones and claystones of the Sespe Formation lies at depths ranging from 10 to 180 feet below grade, primarily as relatively distinct groundwater zones within individual sandstone beds (or portions of beds) layered between lower permeability finer-grained sandstone, siltstone, and claystone beds.
25. The landfill lies in an area of meager ground water resources, because the underlying Sespe Formation appears to have only a limited ability to store and/or transmit water.
26. The nearest active fault, the Simi Fault, is located approximately 1.0 mile south of the landfill. The nearest major active fault, the Northridge Fault, is located 14 kilometers (8 miles) east of the site. Active faults are defined as Holocene Epoch faults that have exhibited surface movement in the last 11,000 years.
27. Landfill slopes will be designed and constructed in a manner that will accommodate settlement and remain stable during the design earthquake event in accordance with Section 20370 of Title 27.
28. The Regional Board adopted a revised Water Quality Control Plan (Plan) for the Los Angeles Region on June 13, 1994. The Plan contains water quality objectives and beneficial uses for ground water of the Simi Valley Ground Water Basin. Beneficial uses include municipal, domestic and agricultural supply, industrial service and process supply. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Plan.

This Regional Board has notified the discharger and interested agencies and persons of its intent to adopt waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

This Regional Board in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that Waste Management of California, Inc. (discharger), shall comply with the following at Simi Valley Landfill:

A. Acceptable Materials

1. The Simi Valley Landfill is a Class III waste management facility.
2. Wastes disposed of at this waste management facility shall be limited to certain nonhazardous solid wastes and inert solid wastes, as described in Section 20220 (a) and Section 20230 of Title 27.
3. Nonhazardous solid waste means all putrescible and non-putrescible solid, semi-solid and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, non-friable asbestos, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded waste (whether of solid and semi-solid consistency); provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation to waters of the State (i.e., designated waste).
4. Treated auto shredder waste may be discharged subject to the conditions in Provision C of this Order, as allowed pursuant to Title 22, California Code of Regulations.
5. Dewatered sewage or water treatment sludge may be discharged under the following conditions:
 - a. In areas with approved liner and LCRS systems, sludge may be discharged provided it contains at least 20 percent solids if primary sludge, or at least 15 percent solids if secondary sludge, mixtures of primary or secondary sludges, or water treatment sludge.
 - b. In areas where no approved liner and LCRS exists, sludge may be discharged if it contains at least 50 percent solids whether primary or secondary sludge, mixtures of primary or secondary sludges, or water treatment sludge.
 - c. A minimum solids to liquids ratio of 5:1 by weight shall be maintained to ensure that the co-disposal will not exceed the initial moisture-holding capacity of the nonhazardous solid waste.
6. The landfill will accept waste for disposal as deemed acceptable at this class of facility by the Regional Board through Orders or regulations.

B. Unacceptable Materials

1. No hazardous wastes, designated wastes, or special wastes, such as liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids, such as salts, borax, lye, caustic or acids shall be disposed of at this waste management facility.
2. No semi-solid wastes shall be disposed of at this waste management facility, except sludges under conditions set forth in Provision A above, or unless they are first processed in a solidification operation as described in Provision C below. Semi-solid waste means waste containing less than 50 percent solids, as described in Section 20200 of Title 27.
3. No materials which are of a toxic nature, such as insecticides, poisons, or radioactive materials, shall be disposed of at this waste management facility.
4. No infectious materials or hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal and human disease, shall be disposed at this waste management facility.
5. No pesticide containers shall be disposed of at this waste management facility, unless they are rendered nonhazardous by triple rinsing. Otherwise, they must be hauled off site to a legal point of disposal.
6. No septic tank or chemical toilet wastes shall be disposed of at this waste management facility.
7. The discharge of wastes or waste by-products (i.e., leachate or gas condensate) to natural surface drainage courses or to groundwater is prohibited.

C. Requirements for Disposal Site Operations

1. All Federal, State, and County sanitary health codes, rules, regulations, and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of this waste management facility.
2. Neither the disposal nor handling of wastes at this waste management facility shall create nuisance or pollution, as defined in Section 13050 of the California Water Code.
3. The discharger shall implement the Hazardous Waste Exclusion Program described in the Report of Waste Discharge to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable materials.
4. The discharger shall comply with notification procedures contained in Section 32171 of the California Water Code in regards to the discharge of hazardous wastes. The discharger shall remove and relocate to a legal point of disposal, any wastes which are discharged at this site in violation of these requirements. For the purpose of these requirements a legal point of disposal is defined as one

for which waste discharge requirements have been established by a California Regional Water Quality Control Board and is in full compliance therewith. The Regional Board shall be informed within 7 days in writing when relocation of wastes is necessary. The source and final disposition (and location) of the wastes, as well as methods undertaken to prevent future recurrence of such disposal shall also be reported.

5. All wastes shall be covered at least once during each 24-hour period in accordance with Sections 20680 and 20705 of Title 27. Intermediate cover over wastes discharged to this landfill shall be designed and constructed to minimize percolation of precipitation through wastes and contact with material deposited. Other measures will be taken as needed to prevent a condition of nuisance from fly breeding, rodent harborage, and other vector-related activities.
6. Wastes deposited at this site shall be confined thereto, and shall not be permitted to blow, fall, or otherwise migrate off the site, or to enter offsite water drainage ditches or watercourses.
7. Alternative daily cover may be used consistent with Section 20690 of Title 27, subject to the following conditions:
 - a. Treated auto shredder waste may be discharged or used as alternative daily cover, provided it shall not be discharged or used on exterior permanent side slopes of the landfill, defined as areas shown on final grading plans as having a slope of 3 horizontal to 1 vertical, or steeper.
 - b. Sludge-derived material shall not be used as alternative daily cover in areas of the site where public access is permitted.
8. The migration of gases from the waste management facility shall be controlled as necessary to prevent water pollution, nuisance, or health hazards.
9. Gas condensate gathered from the gas monitoring and collection system at this waste management facility shall not be returned to the waste management unit unless using a method approved by the Executive Officer. Any proposed modifications or expansions to this system shall be designed to allow the collection, testing and treatment, or disposal by approved methods, of all gas condensate produced at the waste management facility.
10. The discharger shall intercept and remove any liquid detected in the leachate collection and removal system (LCRS) at this waste management facility to a legal point of disposal and leachate shall not be returned back to the waste management unit except for dust control as allowed under Provision F.6 or using a method approved by the Executive Officer. If determined to be hazardous, collected leachate shall be transported by a licensed hazardous waste hauler to an approved treatment and disposal facility.

11. In any area within the waste management unit where a natural spring or seep is observed, provisions shall be made and/or facilities shall be provided to ensure that this water will not come in contact with decomposable refuse in this facility. The locations of all springs and seeps found prior to, during, or after placement of waste material that could affect this waste management facility shall be reported to the Regional Board.
12. Drainage controls, structures, and facilities shall be designed to divert any precipitation or tributary runoff and prevent ponding and percolation of water at the waste management facility in compliance with Sections 20365 and 21090(b)(1) of Title 27. When necessary, temporary structures shall be installed as needed to comply with this requirement.
13. The waste management facility shall be graded and maintained to promote runoff of precipitation and to prevent ponding of liquids and surface water. Erosion or washout of refuse or cover materials by surface flow shall be controlled to prevent off-site migration.
14. Ponding of liquids over deposited wastes is prohibited.
15. Cut and subgrade slopes, fill slopes, refuse cells and visual berms shall be designed and excavated / constructed in a manner that will resist settlement and remain stable during the design earthquake event in accordance with Section 20370 of Title 27.
16. No wastewater or storm water shall leave this site except as permitted by a National Pollutant Discharge Elimination System permit issued in accordance with the Federal Clean Water Act and the California Code of Regulations. The discharger shall maintain and modify, as necessary, the Stormwater Pollution Prevention Plan developed for this waste management facility.
17. Any abandoned wells or bore holes under the control of the site owner or discharger, and situated within the site boundaries, must be located and properly modified or sealed to prevent mixing of any waters between adjacent water-bearing zones. A notice of intent to decommission a well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other appropriate agencies.
18. The Regional Board shall be notified of any incident resulting from site operations that may endanger health or the environment. The notification shall fully describe the incident, including time of occurrence and duration of the incident, a description of the type of, time of, and duration of corrective measures, when correction will be complete (if the endangerment is continual), and the steps taken or planned to reduce or prevent recurrence.
19. The discharger is authorized to operate a solidification operation for processing of sludge and acceptable non-hazardous semi-solid or wet wastes including wastewater treatment plant grit and screenings, that are received at the site

containing less than 50% solids. Said operation shall be established only in areas of the site where an approved liner and LCRS system exists, and shall conform to the following conditions:

- a. Sludge and wet wastes shall be discharged over a minimum of 24" of soil placed over refuse in a lined area of the site, prior to mixing with soil, refuse, processed greenwaste, wood chips, or similar bulking agents.
- b. Material shall be mixed to achieve a minimum solids content of 50% using a method to be approved by the Executive Officer.
- c. Operation of the sludge and wet waste processing area shall not create noxious odors or other nuisance conditions.
- d. Processed sludge may be discharged as waste, or be spread as alternate daily cover over sloped areas of the active disposal face or in other locations where no public contact will occur.
- e. Processed wet waste other than sludge shall be disposed in the active working face and covered with daily cover as provided in this Order.

D. Water Quality Protection Standards

1. In accordance with Section 20390 of Title 27, the following water quality protection standards (WQPS) are established for this waste management facility.

Point of Compliance

The point of compliance where the WQPS shall apply is a vertical surface located at the hydraulically downgradient limit of the waste management unit that extends through the uppermost aquifer underlying the waste management unit.

Compliance Period

The compliance period is the minimum period of time during which water quality monitoring shall be conducted subsequent to a release from the waste management unit. The compliance period for this waste management facility shall be the active life of any waste disposal unit on the site, and for thirty (30) years following closure of the site in accordance with Section 20950 of Title 27.

Monitoring Points

Monitored Medium	Monitoring Points
Surface Water	SP 1 - near the sedimentation basin SP 2 - south end east side ditch SP 3 - 6-inch pipe near mitigation area

Unsaturated Zone	Future permanent sumps (lysimeters to be constructed)				
Ground Water	E-17 E28-RD4 WM-01 WM-11	E22 E-29 WM-02RD WM-12	E-23RD M-01-ARD WM-04	E-25 S-01-ARD WM-09	E-26 S-07E WM-10

Constituents of Concern and the Concentration Limits

Parameter	Test Method	Concentration Limits for Monitoring Points (Groundwater and Vadose Zone Monitoring)
Antimony (dissolved)	EPA 6010	PL
Arsenic (dissolved)	EPA 7060	PL
Barium (dissolved)	EPA 6010	PL
Beryllium (dissolved)	EPA 6010	PL
Bicarbonate (CaCO ₃)	Std. Method 2320B	PL
Biological Oxygen Demand (BOD)	EPA 405.1	PL
Cadmium (dissolved)	EPA 6010	PL
Calcium (dissolved)	EPA 6010	PL
Carbonate (CaCO ₃)	Std Method 2320B	PL
Chemical Oxygen Demand (COD)	EPA 410.4	PL
Chloride	EPA 300.0	PL
Chromium (dissolved)	EPA 6010	PL
Cobalt (dissolved)	EPA 6010	PL
Copper (dissolved)	EPA 6010	PL
Electrical Conductivity (umhos/cm)	Field	PL
Fluoride	EPA 340.2	PL
Foaming Agents (MBSA)	EPA 425.1	PL
Herbicides (ug/L)	EPA 8150	MDL
Hexavalent Chromium (dissolved)	Std M3500 CrO	PL
Hydroxide Alkalinity (CaCO ₃)	Field, Std. M2320B	PL
Iron (dissolved)	EPA 6010	PL
Lead (dissolved)	EPA 6010	PL
Mercury (dissolved)	EPA 7470	PL
Molybdenum (dissolved)	EPA 6010	PL
Nickel (dissolved)	EPA 6010	PL
Nitrate (as N)	EPA 300.0	PL
Nitrite	EPA 300.0	PL
Oil and Grease	EPA 413.2	PL
Pesticides and PCBs (ug/L)	EPA 3510/8080	MDL
pH (std. unit)	Field	PL
Potassium (dissolved)	EPA 6010	PL
Selenium (dissolved)	EPA 7740	PL
Semi-volatile Organic Compounds (ug/L)	EPA 3510/8270	MDL
Silver (dissolved)	EPA 6010	PL
Sodium (dissolved)	EPA 6010	PL
Sulfate	EPA 300.0	PL

Sulfides	EPA 376.2	PL
Thallium (dissolved)	EPA 6010	PL
Tin (dissolved)	EPA 6010	PL
Total Cyanide	EPA 335.2	PL
Total Dissolved Solids (TDS)	EPA 160.1	PL
Total Hardness (as CaCO ₃)	Std. M 2340B	PL
Total Organic Carbon (TOC)	EPA 415.1	PL
Total Organic Halides (TOX)	EPA 9020	PL
Total Phenols	EPA 420.1	PL
Turbidity (NTU)	EPA 180.1	PL
Vanadium (dissolved)	EPA 6010	PL
Volatile Organic Compounds (ug/L)	EPA 8260	MDL
Zinc (dissolved)	EPA 6010	PL

Notes:

PL = Statistical prediction limit as calculated using DUMPStat statistical modeling software described in Revised Proposed Detection Monitoring Program, November 1999.

MDL = The lowest method detection limit as specified in the test method.

E. Provisions for Water Quality Monitoring

1. The discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with Section 13267 of the California Water Code. Failure or refusal to furnish these reports, or falsifying any information provided therein, renders the discharger guilty of a misdemeanor and subject to the penalties stated in Section 13268 of the California Water Code. Monitoring reports shall be submitted in accordance with the specifications contained in the attached Monitoring and Reporting program No. 5643 (Attachment T), as directed by the Executive Officer. The attached Monitoring and Reporting Program is subject to periodic revisions, as warranted and approved by the Executive Officer.
2. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained for the active life of this site and during the closure and postclosure maintenance periods. If any of the monitoring wells and/or monitoring devices are damaged, destroyed, or abandoned for any reason, the discharger shall provide substitutes acceptable to the Executive Officer to meet the monitoring requirements of the Order.
3. The discharger shall maintain all monitoring wells and/or piezometers in accordance with acceptable industry standards. If a well or piezometer is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within 7 days of such discovery, and this notification shall contain a time schedule for returning the well or piezometer to operating order. Changes to the existing program shall be submitted for Executive Officer approval at least 30 days prior to implementing the change(s).

4. The discharger shall provide for proper handling and disposal of water purged from the monitoring wells during sampling. Water purged from the wells shall not be returned to that well (or any other well).
5. For any monitoring wells or piezometers installed in the future, the discharger shall submit technical reports for approval by the Executive Officer, prior to installation. These technical reports shall be submitted at least 60 days prior to the anticipated date of installation of the wells or piezometers. These reports shall be accompanied by:
 - a. Maps and cross sections showing the locations of the monitoring points; and
 - b. Drawings and data showing construction details of the monitoring points. These data shall include:
 - (i) casing and test hole diameter;
 - (ii) casing materials;
 - (iii) depth of each hole;
 - (iv) the means by which the size and position of perforations shall be determined, or verified, if in the field;
 - (v) method of joining sections of casing;
 - (vi) nature of filter materials;
 - (vii) depth and composition of soils; and
 - (viii) method and length of time of well development.

If a well or piezometer is proposed to replace an inoperative well or piezometer, the discharger shall not delay replacement while waiting for Executive Officer approval. However, the technical report shall be submitted within the required time schedule.

6. The discharger shall conduct required monitoring and response programs in accordance with Section 20385 of Title 27. (A detection monitoring program per Section 20420 of Title 27, an evaluation monitoring program per Section 20425 of Title 27, and a corrective action program per Section 20430 of Title 27.)
7. For each monitoring point described in this Order, the discharger shall monitor the monitoring parameters as specified in the attached Monitoring and Reporting Program No. 5643 in groundwater, surface water, and the vadose zone for the detection monitoring program. In determining whether measurably significant evidence of a release from the waste management unit exists, concentration limits of constituents of concern, listed in Provision D of this Order, shall be used for the monitoring parameters.

F. Provisions for On-site Uses of Water

1. Any water used for landscape irrigation, dust control or other non-emergency uses, shall be subject to waste discharge requirements and/or water reclamation

requirements, except for potable water and any other water allowed by this Order.

2. All use of water shall be within the boundaries of the landfill property. During an emergency, this water may be used for fire fighting on the site or on undeveloped areas off and adjacent to the site.
3. No water shall be routinely applied to the waste management unit except for landscape irrigation, or for surface dust control. Water used for these purposes shall only be applied by spraying, and shall be applied only on completed lifts, in quantities not to exceed those necessary to reduce immediate dust hazards or support plant life.
4. During periods of precipitation, when the use of extracted waste water is not necessary for the purpose specified in this Order, the waste water shall be stored or hauled to a legal point of disposal.
5. Washing of landfill equipment or vehicles shall be confined to areas where the waste water will not percolate into the disposal areas or native soil, or enter the storm water collection system, unless specifically permitted by waste discharge requirements.
6. Wash water from cleaning site equipment, leachate from the toe barrier, and leachate removed from the site's LCRS intended to be used on-site for dust control or irrigation shall at all times be within the range of 6.0 to 9.0 pH units, and shall not exceed the following limits:

Constituents	Unit	Maximum Limit
COD	mg/l	300
Oil and Grease	mg/l	15
BNA ¹	mg/l	0.1
Total Heavy Metals ²	mg/l	1.5
Purgeable Organics ³	mg/l	45.0
<p>1 BNA shall include the summation of concentrations of all base/neutral and acid extractable organic priority pollutant compounds.</p> <p>2 Total heavy metals shall include the combined concentrations of the following metals: arsenic, cadmium, copper, lead, nickel, selenium, silver and zinc.</p> <p>3 Purgeable organic compounds shall include the summation of concentrations including purgeable priority pollutants, acetone and 2-butanone. No individual parameter may exceed 20 percent of the Maximum limit.</p>		

7. Any water used on-site for irrigation or dust control shall not exceed the maximum contaminant levels contained in Section 64435 of Title 22, California

Code of Regulations for heavy metals, nitrates and organic chemicals, and in Section 64473 for copper and zinc. Radioactivity shall not exceed the limits specified in Sections 64441 and 64443 of Title 22 (or subsequent revisions).

G. Provisions for Containment Structures

1. The waste management facility shall have containment structures which are capable of preventing degradation of the waters of the State. Construction standards for containment structures shall comply with Title 27 requirements. Design specifications are subject to the Executive Officer's review and approval prior to construction of any containment structures.
2. The discharger shall submit detailed preliminary plans, specifications, and descriptions for all proposed containment structures and construction features for Executive Officer approval at least 90 days prior to construction.
3. The preliminary plans shall contain detailed quality assurance / quality control for the proposed construction as required by Title 27.
4. Prior to start of construction of any containment structure, a geologic map shall be prepared of the final excavation grade for review, approval and confirmation in the field by Regional Board staff.
5. No disposal shall occur in a new area until the corresponding construction is completed and certified.
6. The construction report, including drawings documenting "as-built" conditions, shall be submitted within 60 days after the completion of construction. If the "as-built" conditions are virtually identical to the approved preliminary plans and specifications, only change sheets need be submitted in lieu of a complete set of drawings.
7. The discharger shall perform an annual testing for any LCRS to demonstrate their operating efficiency during the compliance period of the waste management unit.

H. Provisions for Reporting Scheduled Activities

1. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the Order. The discharger shall also furnish the Regional Board, upon request, copies of records required to be kept by this Order.
2. In accordance with Section 21710 of Title 27, the discharger shall notify the Regional Board within 7 days, if fluid is detected in a previously dry LCRS, or if a progressive increase in the liquid volume is detected in a LCRS.

3. The discharger shall notify the Regional Board of changes in information submitted in the Report of Waste Discharge and supplementary information, including any material changes in the types, quantities or concentrations of wastes discharged, or site operations and features. The discharger shall notify the Regional Board before any material change is made in accordance with Section 21710 of Title 27.
4. The discharger shall notify the Regional Board in writing of any proposed change of ownership or responsibility for construction, operation, closure or postclosure maintenance of this waste management facility. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure and postclosure maintenance will be in compliance with any existing waste discharge requirements and any revisions.
5. The discharger shall comply with the closure and postclosure maintenance requirements and notification requirements contained in Title 27. Closure must be in accordance with a Closure Plan and Postclosure Maintenance Plan approved by the Executive Officer, California Integrated Waste Management Board, and local enforcement agency.


I. General Provisions

1. The discharger shall comply with all other applicable provisions, requirements, and procedures contained in the most recent version of Title 27 and any future amendments.
2. Regional Board staff shall be allowed entry to the waste management facility and to areas where records are kept regarding the waste management facility, at any reasonable time. Staff shall be permitted to inspect any area of the landfill and any monitoring equipment used to demonstrate compliance with the Order. Staff shall be permitted to copy any records, photograph any area, obtain samples, and/or monitor operations to assure compliance with this Order, or as authorized by applicable laws or regulations.
3. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.
4. This Regional Board considers the property owner(s) to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge and from gases and leachate that may be caused by infiltration or precipitation of drainage waters into the waste disposal units or by infiltration of water applied to this facility during subsequent uses of the land for other purposes.
5. These requirements do not exempt the discharger from compliance with any other current or future law which may be applicable. The requirements are not a permit; they do not legalize this waste management facility, and they leave

unaffected any further restraints on the disposal of wastes at this waste management facility which may be contained in other statutes.

6. The requirements adopted herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from their liabilities under Federal, State, or local laws.
7. The filing of a request by the discharger for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirements of this Order.
8. This Order does not convey any property rights of any sort, or any exclusive privilege.
9. The discharger must comply with all of the terms, requirements, and conditions of this Order. Any violation of this Order constitutes a violation of the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance, or a combination thereof.
10. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including but not limited to:
 - a. Violation of any term or condition in this Order;
 - b. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
 - c. A change in any condition that required either a temporary or permanent reduction or elimination of the authorized waste discharge.
11. According to Section 13263 of the California Water Code, these requirements are subject to periodic review and revision by this Regional Board.
12. Order No. 90-034, adopted on February 26, 1990, and amended by Order 93-062 on September 27, 1993, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 29, 2000.



Dennis A. Dickerson
Executive Officer

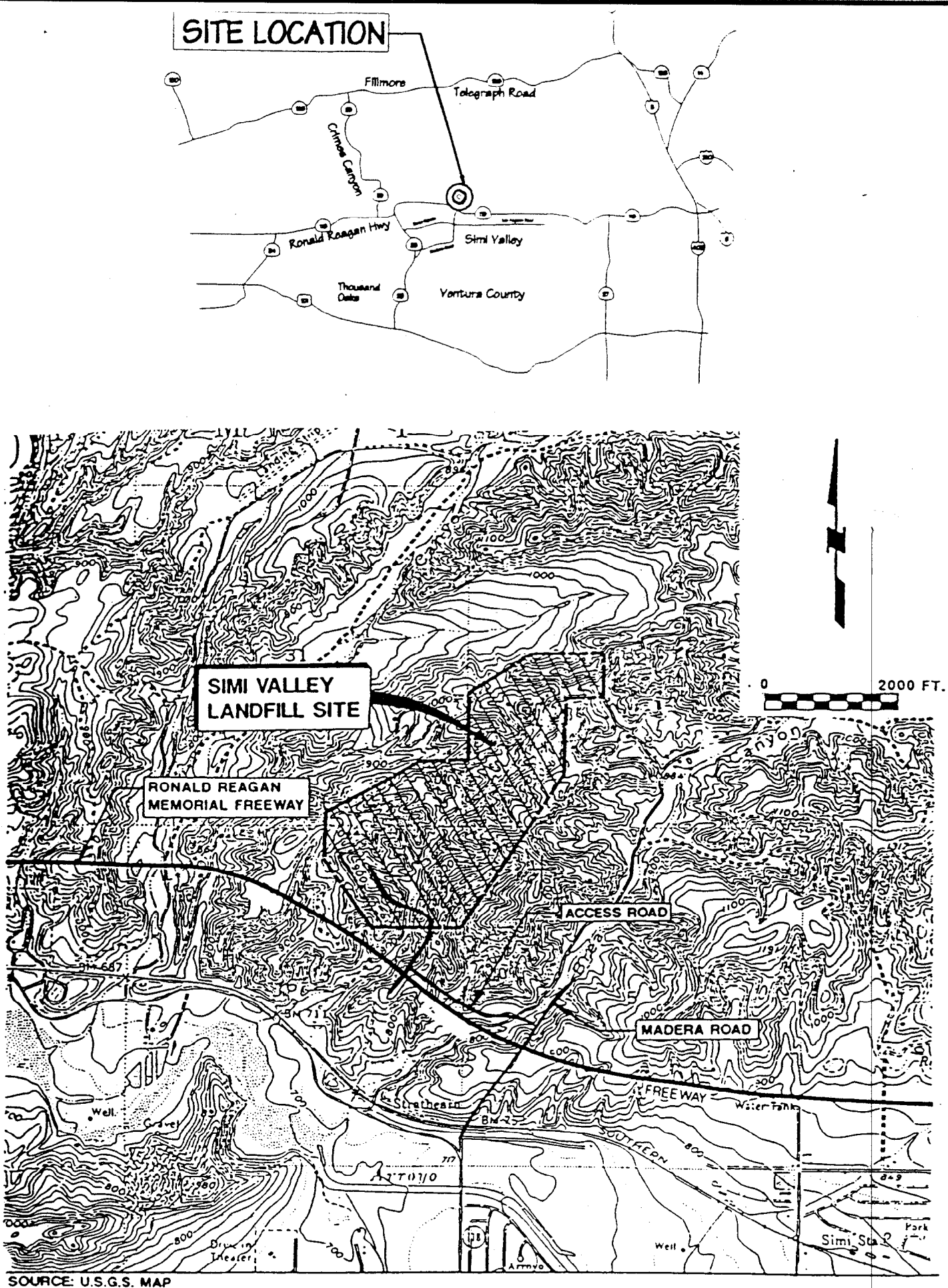


Figure 1.

ATTACHMENT T

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. 5643
FOR**

**WASTE MANAGEMENT OF CALIFORNIA, INC.
(Simi Valley Landfill)**

(File No. 69-090)

I. Reporting

- A. The discharger shall implement this revised Monitoring and Reporting Program beginning August 1, 2000. Water quality monitoring reports shall be submitted to the Board semi-annually by April 30 and October 30 of each year.
- B. The discharger shall submit waste disposal reports to the Regional Board quarterly on the following schedule: the first quarter reports by April 30 of each year, the second quarter reports by July 30 of each year, the third quarter reports by October 30 of each year, and the fourth quarter reports by January 30 of each year.
- C. Quarterly monitoring as required for the detection monitoring program shall be performed during the months of January, April, July and October. Semi-annual monitoring shall be conducted during the months of January and July. Annual monitoring shall be performed during the month of October. In the event monitoring is not performed as above because of unforeseen circumstances, substitute monitoring shall be performed as soon as possible after these times, and the reason for the delay shall also be given.
- D. By April 30 of each year, the discharger shall submit an annual report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the discharger shall discuss the compliance record, including the result of annual leachate collection and removal systems performance test and the effectiveness of the corrective actions taken or planned which may be needed to bring the discharge into full compliance with the waste discharge requirements.
- E. All chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services Environmental Laboratory Accreditation Program, or approved by the Executive Officer. Laboratory analyses must follow methods approved by the United States Environmental Protection Agency, and the laboratory must meet EPA Quality Assurance/Quality Control criteria.
- F. For any analyses performed for which no procedures are specified in the EPA guidelines or in this Monitoring and Reporting Program, the constituent or parameter analyzed, and the method or procedure used, must be specified in the Report.

- G. The discharger may submit additional data to the Regional Board not required by this program in order to simplify reporting to other regulatory agencies.
- H. Analytical data reported as "less than ..." shall be reported as less than a numeric value, or below the limit of detection for that particular analytical method. Also, method detection limits for each monitoring parameter shall be reported.
- I. If the discharger performs analyses for any parameter more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the monitoring report.
- J. The results of the waste load checking program as described in the Report of Waste Discharge shall be reported in each waste disposal report.
- K. For every item where the requirements are not met, the discharger shall submit a statement of the actions undertaken or proposed which will bring the discharger into full compliance with requirements at the earliest time and submit a timetable for correction.
- L. The discharger shall retain records of all monitoring information, including all calibration and maintenance records regarding monitoring instrumentation and copies of all data submitted to regulatory agencies for a period of at least five years. This period may be extended by request of the Regional Board at any time, and shall be extended during the course of any unresolved litigation regarding all or any part of the entire waste management facility.
- M. This Monitoring and Reporting Program includes the attached "Standard Provisions Applicable to Waste Discharge Requirements" (Attachment W). If there is any conflict between provisions stated herein and the "Standard Provisions Applicable to Waste Discharge Requirements", these provisions stated herein will prevail.
- N. Records of monitoring information shall include:
 - 1. The date, exact place, procedure, and time of sampling or measurement;
 - 2. The individuals who performed the sampling or measurement;
 - 3. The date(s) analyses were performed on the samples;
 - 4. The individual(s) who performed the analyses;
 - 5. The analytical methods used;
 - 6. The results of the analyses or measurements, including both statistical and non-statistical analyses;
 - 7. The method detection limits;
 - 8. The executive summary of the key findings;
 - 9. The laboratory QA/QC data and chain of custody records (except for annual reports);
 - 10. The laboratory certification information;
 - 11. The velocity and direction of groundwater flow; and,

12. The measurement of the static water levels of all monitoring wells.
- O. In reporting the monitoring data, the discharger shall arrange the data in tabular form.
- P. Monitoring reports shall be signed by:
- a. In the case of corporations, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
 - b. In the case of a partnership, by a general partner;
 - c. In the case of a sole proprietorship, by the proprietor; or
 - d. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official or other duly authorized employee.
- Q. Each report shall contain the following completed declaration:
- "I declare under penalty of perjury that the following is true and correct.
- Executed on the _____ day of _____ at _____

_____(Signature)

_____(Title)

II. WASTE DISPOSAL REPORTING

- A. The reports to the Regional Board shall include a map of the site, and shall indicate the area(s) where disposal is taking place or will begin. This map shall be updated quarterly, and summarized and submitted with the annual report due April 30 of each year. If a new area is landfilled, it shall be identified in the corresponding quarterly report.
- B. A waste disposal report containing the following information shall be filed with the Regional Board each quarter:
- 1. A tabular list of the estimated average monthly quantities (in cubic yards and tons) and types of materials (including dewatered sewage sludge) deposited each month. For dewatered sludge, quantities per each generator shall be listed.

2. An estimate of the remaining capacity (in cubic yards and tons) and the remaining life of the site in years and months.
3. A certification that all wastes deposited were deposited in compliance with the Board's requirements, and that no wastes were deposited outside of the boundaries of the waste management area as specified in the Board's requirements.
4. A description of the location and an estimate of the seepage rate or flow of all known seeps and springs at the site.
5. The estimated amount of water used at the waste management area for landscape irrigation, compaction, dust control, etc., during each month. (If a source other than potable water is used, the sources and amounts of water from each source shall also be reported.)
6. Quantities of liquid pumped from each leachate monitoring sump and/or extraction well, including dates of removal, and the ultimate disposition. If no liquid was detected or pumped from any sump or well during the reporting period, a statement to that effect shall be submitted.
7. Quantities of leachate and gas condensate returned to the waste management unit(s) during each month. Information shall include the quantity of leachate and/or condensate returned to each lined cell, and the method used (subsurface introduction, direct application to waste prior to covering, or other method approved by the Regional Board).
8. The discharger shall report all unacceptable (to this site) wastes inadvertently received at this site and their disposition. The following details shall be included:
 - a. The source (if known), including the hauler, of the unacceptable wastes and date received and/or discovered.
 - b. Identification of waste (if known) and the amount of waste.
 - c. The name and address of the hauler who removed the waste from this site
 - d. The ultimate point of disposal for the waste.
 - e. The discharger's actions to prevent recurrence of the attempted depositing of unacceptable wastes by this source or individual (if applicable).

If no unacceptable wastes were received (or discovered) during the month, the report shall so state.

C. In addition to reporting the quantity of dewatered sludge per each generator deposited each month as noted in Section II.B above, quarterly samples of incoming sludge shall be obtained and analyzed as follows:

1. For a 24-hour period (one operating day at the site) each load of sludge shall be sampled. All of these samples shall be weight-proportion composited and mixed as completely as possible (preferably in the absence of oxygen) into a single sample. The total percent solids of the sample shall be reported.
2. An extraction solution of the sludge shall be prepared for analyses using the Waste Extraction Test (WET) method as outlined in the California Department of Health Services' California Assessment Manual; for Hazardous Wastes (CAM) except as follows:
 - a. The pH of the citrate buffer shall be 4.5.
 - b. All testing shall be done on the 48 hour extracts only. Additional extracts (for cumulative times of 6, 14, and 30 days) need not be prepared.
3. The extracts shall be analyzed for total Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Silver, Thallium, Tin, Vanadium, Zinc and Total Organic Halogens (to a precision of ug/dry kg if necessary for detection).
4. Volatile and semi-volatile organic compounds shall also be analyzed using EPA Test Methods 8260 and 8270, respectively, with the lowest detection limits.
5. These results shall be reported in the corresponding semi-annual report.

III. MONITORING OF TREATED AUTO SHREDDER WASTE

A. Treated auto shredder waste (TASW) samples from Hugo Neuproler Company or other TASW generators shall be sampled and analyzed according to the Waste Extraction Test procedure described in Title 22, California Code of Regulations, Section 66261.126, Appendix II (Metals) and Appendix II-Table 4 (PCBs), for the following constituents:

Constituent	Unit	Frequency
STLC		
Cadmium and/or cadmium compounds	mg/l	Monthly
Chromium and/or chromium compounds	mg/l	Monthly
Copper an/or copper compounds	mg/l	Monthly
Lead and/or lead compounds	mg/l	Monthly
Mercury and/or mercury compounds	mg/l	Monthly
Nickel and/or nickel compounds	mg/l	Monthly
Zinc and/or zinc compounds	mg/l	Monthly
TTLC		
Polychlorinated biphenyls (PCBs)	mg/l	Monthly

- B. Shredder waste samples from each source shall also be analyzed once per month for volatile organic compounds using EPA method 8240. A grab sample shall be randomly obtained from the sampler for this analysis and immediately sealed in an appropriate container.
- C. Composite samples of the waste stream from each shredder source shall be collected daily according to the following procedure: The waste stream will be cut every half-hour and approximately a one pound sample obtained. The combined samples for one week will be mixed, coned and quartered prior to submission to the laboratory. One weekly composite shall be subjected to the monthly testing. The shredder waste producers may present an alternate procedure for compositing samples for Executive Officer approval.
- D. The discharger shall tabulate and report the quantity of TASW deposited each calendar month and the number of loads deposited from each generator. The discharger shall also submit copies of all analytical results of wastes deposited with each report.

IV. GROUND WATER AND VADOSE ZONE MONITORING

1. Provisions and General Requirements

- A. All sampling, sample preservation and analyses shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the United States Environmental Protection Agency.
- B. The discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurement, or shall ensure that both activities will be conducted.

- C. No filtering of samples taken for organics analyses shall be permitted. Samples for organic analyses shall be taken with a sampling method which minimizes volatilization and degradation of potential constituents.
- D. Analytical results for ground water monitoring shall be submitted with the corresponding semi-annual monitoring report. If a well was not sampled (or measured) during the reporting period, the reason for the omission shall be given. If no fluid was detected in a monitoring well, a statement to that effect (in lieu of analyses) shall be submitted.
- E. Quarterly observations and measurements of the static water levels shall be made on all monitoring wells and piezometers, and records of such observations shall be submitted with the semi-annual monitoring reports.
- F. All monitoring wells shall be sounded each third quarter to determine total depth. Wells affected by pumping shall be measured prior to pumping insofar as is possible.
- G. Duplicate samples shall be taken for constituents of concern metals analyses only. Unfiltered samples shall be tested for total metals, and field-filtered samples (0.45 microns) shall be tested for dissolved metals. Both samples must be preserved with nitric acid; however, care shall be taken that the dissolved metals samples are not exposed to solids until after filtering.
- H. Representative water samples shall be obtained from at least the monitoring points listed in Provision D of this Regional Board's Order No. 00-092.
- I. The laboratory QA/QC report shall include, at a minimum, method blanks, calibration checks, surrogate recoveries, matrix spikes, and matrix spike duplicates, spiking concentrations, and laboratory quality control samples. Spiking concentration must be no more than 10 times of method detection limit.
- J. Practical quantitation limits shall be below the current maximum Contaminant Levels listed in Title 22 of California Code of Regulations or Action Levels recommended by the California Department of Health Services, whenever it is possible.
- K. Proper chain of custody procedures shall be used.
- L. Constituents detected between the method detection limits and the practical quantitation limits must be reported, but may be reported as a trace.

2. Sampling and Analyses

- A. Routine sampling and analyses of ground water and soil pore liquids for the detection monitoring program shall consist of the following monitoring parameters.

Monitoring Parameters	Test Method
Groundwater	
Bicarbonate (CaCO ₃)	Std. Method 2320B
Chemical Oxygen Demand	EPA 410.4
Chloride	EPA 300.0
Electrical Conductivity	Field
Nitrate (as N)	EPA 300.0
Nitrite	EPA 300.0
pH	Field
Sodium	EPA 6010
Sulfate	EPA 300.0
Total Dissolved Solids	EPA 160.1
Total Hardness (as CaCO ₃)	Std. Method 2340B
Volatile Organic Compounds	EPA 8260
Vadose Zone	
Bicarbonate (CaCO ₃)	Std. Method 2320B
Sodium	EPA 6010
Total Dissolved Solids	EPA 160.1
Volatile Organic Compounds	EPA 8260

- B. Routine sampling and analyses consisting of the constituents of concern listed in Provision D of the Regional Board's Order No. 00-092 shall be completed every five years (starting year 2001), unless required more frequently due to an indication of a release, as described in Title 27, California Code of Regulations, Section 20420.

V. STORM WATER MONITORING


- A. The discharger shall perform stormwater discharge monitoring consistent with the requirements of Water Quality Order 97-03-DWQ (Waste Discharge Requirements for Discharge of Storm Water Associated with Industrial Activities Excluding Construction Activities) adopted by the California State Water Resources Control Board under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001 and Stormwater Pollution Prevention Plan, Simi Valley Landfill, Ventura County, California.
- B. Stormwater discharge samples shall be analyzed for the following monitoring parameters: Chemical Oxygen Demand (COD), Cyanide, nitrate, Total Kjeldahl Nitrogen (TKN), Oil and Grease, Total Suspended Solids (TSS), pH, Specific Conductance, Cadmium, Lead, Magnesium, Mercury, Selenium and Silver.

- C. Stormwater monitoring results shall be reported separately, due annually by July 1, as required by the stormwater permit.

VI. MONITORING OF ON-SITE USE OF WATER

- A. If wash water from cleaning site equipment, and treated leachate removed from the site's leachate collection and removal system and the toe barrier is used on-site in accordance with Provision F of Order No. 00-092, the discharger shall analyze constituents listed in Provision F.6 and Provision F.7 of Order No. 00-092 on a quarterly basis and submit the data in the semi-annual monitoring report.

Ordered By:



Dennis A. Dickerson
Executive Officer

Date: June 29, 2000